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L4	L2 AND elimination	162	L4
L3	L2 AND methods ADJ removal	0	L3
L2	L1 AND (optimization OR (method ADJ removal) OR dead ADJ code ADJ elimiation)	1146	L2
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(object oriented)and (optimization)

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Results:
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1 **Topology optimization of nonlinear magnetostatics**
Wang, S.; Kang, J.
Magnetics, IEEE Transactions on , Volume: 38 Issue: 2 Part: 1 , March 2002
Page(s): 1029 -1032

[Abstract] [PDF Full-Text (301 KB)] **JNL**

2 **A generic classification and object-oriented simulation toolkit for SMT assembly equipment**
Tirpak, T.M.; Mohapatra, P.K.; Nelson, P.C.; Rajbhandari, R.R.
Systems, Man and Cybernetics, Part A, IEEE Transactions on , Volume: 32 Issue: 1 , Jan. 2002
Page(s): 104 -122

[Abstract] [PDF Full-Text (512 KB)] **JNL**

3 **A distributed database server for continuous media**
Aref, W.G.; Catlin, A.C.; Elmagarmid, A.K.; Fan, J.; Guo, J.; Hammad, M.; Ilyas, I.F.; Marzouk, M.S.; Prabhakar, S.; Rezgui, A.; Teoh, S.; Terzi, E.; Tu, Y.; Vakali, A.; Zhu, X.Q.
Data Engineering, 2002. Proceedings. 18th International Conference on , 2002
Page(s): 490 -491

[Abstract] [PDF Full-Text (253 KB)] **CNF**

4 **SMX - a novel bject- riented ptimizati n system**

Bakr, M.H.; Bandler, J.W.; Cheng, Q.S.; Ismail, M.A.; Rayas-Sanchez, J.E.
Microwave Symposium Digest, 2001 IEEE MTT-S International , Volume: 3 , May 2001
Page(s): 2083 -2086

[Abstract] [PDF Full-Text (289 KB)] **CNF**

---

5 **CESR lattice design**
Sagan, D.; Rubin, D.
Particle Accelerator Conference, 2001. PAC 2001. Proceedings of the 2001 , Volume: 5 , 2001
Page(s): 3517 -3519 vol.5

[Abstract] [PDF Full-Text (240 KB)] **CNF**

---

6 **Optimization approaches for accelerating dynamic content in E-business**
Dutta, K.; Thomas, H.; Datta, A.; Soni, S.; Narasimhan, S.
Systems, Man, and Cybernetics, 2001 IEEE International Conference on , Volume: 5 , 2001
Page(s): 3032 vol.5

[Abstract] [PDF Full-Text (80 KB)] **CNF**

---

7 **A versatile C++ toolbox for model based, real time control systems of robotic manipulators**
Hopler, R.; Otter, M.
Intelligent Robots and Systems, 2001. Proceedings. 2001 IEEE/RSJ International Conference on , Volume: 4 , 2001
Page(s): 2208 -2214 vol.4

[Abstract] [PDF Full-Text (583 KB)] **CNF**

---

8 **Simulation modeling and optimization using ProModel technology**
Harrell, C.R.; Field, K.C.
Simulation Conference, 2001. Proceedings of the Winter , 2001
Page(s): 226 -232 vol.1

[Abstract] [PDF Full-Text (1284 KB)] **CNF**

---

9 **Statechart simulator for m deling architectural dynamics**
Egyed, A.; Wile, D.
Software Architecture, 2001. Proceedings. Working IEEE/IFIP

Conference on , 2001
Page(s): 87 -96

[Abstract] [PDF Full-Text (936 KB)] **CNF**

---

10 **Object-oriented refactoring process design for the software reuse**
Jong-Ho Lee; Nam-Yong Lee; Sung-Yul Rhew
Industrial Electronics, 2001. Proceedings. ISIE 2001. IEEE International Symposium on , Volume: 1 , 2001
Page(s): 221 -226 vol.1

[Abstract] [PDF Full-Text (542 KB)] **CNF**

---

11 **An advanced electromagnetic tool for design of multilayer printed antenna arrays**
Sabet, K.F.; Jui-Ching Cheng; Sarabandi, K.; Katehi, L.P.B.
Aerospace Conference, 2001, IEEE Proceedings. , Volume: 2 , 2001
Page(s): 2/757 -2/766 vol.2

[Abstract] [PDF Full-Text (1140 KB)] **CNF**

---

12 **A query calculus for spatio-temporal object databases**
Griffiths, T.; Fernandes, A.A.A.; Djafri, N.; Paton, N.W.
Temporal Representation and Reasoning, 2001. TIME 2001. Proceedings. Eighth International Symposium on , 2001
Page(s): 101 -110

[Abstract] [PDF Full-Text (872 KB)] **CNF**

---

13 **Specializing the Java object serialization using partial evaluation for a faster RMI [remote method invocation]**
Jung Gyu Park; Lee, A.H.
Parallel and Distributed Systems, 2001. ICPADS 2001. Proceedings. Eighth International Conference on , 2001
Page(s): 451 -458

[Abstract] [PDF Full-Text (560 KB)] **CNF**

---

14 **Optimizati n f nested inv cation n replicas in object-based systems**
Tanaka, K.; Takizawa, M.
Parallel and Distributed Systems, 2001. ICPADS 2001. Proceedings. Eighth International Conference on , 2001

Page(s): 117 -124

[Abstract] [PDF Full-Text (568 KB)] **CNF**

---

15 **Measuring and ptimizing a system f r persistent database sessions**

Barga, R.S.; Lomet, D.B.

Data Engineering, 2001. Proceedings. 17th International Conference on , 2001

Page(s): 21 -30

[Abstract] [PDF Full-Text (928 KB)] **CNF**

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L6: Entry 2 of 11 File: USPT Dec 4, 2001

US-PAT-NO: 6327699
DOCUMENT-IDENTIFIER: US 6327699 B1

TITLE: Whole program path profiling

DATE-ISSUED: December 4, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Larus; James R.	Mercer Island	WA		
Fraser; Christopher W.	Seattle	WA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Microsoft Corporation	Redmond	WA			02

APPL-NO: 9/ 302854 [PALM]
DATE FILED: April 30, 1999

INT-CL: [7] G06 F 9/45

US-CL-ISSUED: 717/4; 717/7, 717/8
US-CL-CURRENT: 717/128; 717/158

FIELD-OF-SEARCH: 717/4, 717/7, 717/8, 717/9, 702/119, 703/23, 714/15

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5067073	November 1991	Andrews	714/38
☐	5161216	November 1992	Reps et al.	717/4
☐	5355487	October 1994	Keller et al.	717/4
☐	5828883	October 1998	Hall	717/4
☐	5896538	April 1999	Blandy et al.	717/4
☐	5950009	September 1999	Bortnikov et al.	717/9
☐	5999736	December 1999	Gupta et al.	717/9
☐	6070009	May 2000	Dean et al.	717/4
☐	6151706	November 2000	Lo et al.	717/9
☐	6170083	January 2001	Tabatabai	717/9

OTHER PUBLICATIONS

Hall, "Call path profiling", ACM pp 296-306, Jun. 1992.*
Larus, "Whole program paths", ACM SIGPLAN, pp 259-269, May 1999.*
Ball, "Effiicently counting program events with support for online queries", ACM TPLS, pp 1399-1410, vol. 16, No. 5, Sep. 1994.*
Ionnidis et al, "Transitive closure algorithms based on graph traversal", ACM Trans. Database Sys. vo. 18, No. 3, pp 512-576, Sep. 1993.*
Ammons, G., et al., "Exploiting Hardware Performance Counters with Flow and Context Sensitive Profiling", Proceedings of the 1997 ACM SIGPLAN Conference on Programming Laguage Design and Implementation (PLDI), vol. 32, No. 5, pp. 85-96, (May 1997).
Ammons, G., et al., "Improving Data-flow Analysis with Path Profiles", Proceedings of the 1998 ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI), pp. 72-84.
Baker, B.S., "Parameterized Duplication in Strings: Algorithms and an Application to Software Maintenance", Society for Industrial and Applied Mathematics Journal on Computing, 26 (5), pp. 1343-1362, (1997).
Ball, T., "Efficient Path Profiling", Proceedings of the 29th Annual IEEE/ACM International Symposium on Microarchitecture, pp. 46-57, (Dec. 1996).
Ball, T., et al., "Edge Profiling versus Path Profiling: The Showdown", Conference Record of POPL '98: The 25th ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages, pp. 134-148, (Jan. 1998).
Bodik, R., et al., "Refining Data Flow Information Using Infeasible Paths", 6th European Software Engineering Conference, 5th ACM SIGSOFT Symposium on the Foundations of Software Engineering, pp. 361-377, (1997).
Fisher, J.A., "Trace Scheduling: A Technique for Global Microcode Compaction", IEEE Transactions on Computers, C-30 (7), pp. 478-490, (Jul. 1981).
Fisher, J.A., et al., "Parallel Processing: A Smart Compiler and a Dumb Machinep", Proceedings of the SIGPLAN '84 Symposium on Compiler Consturction, 19 (6), pp. 37-47, (Jun. 1984).
Gupta, R., et al., "Path Profile Guided Partial Dead Code Elimination Using Predication", Proceedings--1997 International Conference on Parallel Architectures and Compilation Techniques--IEEE Computer Society, pp. 102-113, (1997).
Jacobson, Q., et al., "Path-Based Next Trace Prediction", Proceedings for the Thirtieth Annual IEEE/ACM International Syposium on Microarchitecture, pp. 14-23, (Dec. 1997).
Larus, J.R., "EEL: Machine-Independent Executable Editing", ACM SIGPLAN Notices, 30 (6), pp. 291-300, (Jun. 1995).
Melski, D., et al., "Interprocedural Path Profiling", Compiler Construction, 8th International Conference, pp. 47-62, (Mar. 1999).
Mosberger, D., et al., "Making Paths Explicit in the Scout Operating Systems", Usenix Association, Proceedings of the Second USENIX Symposium on Operating Systems Design and Implementation (OSDI), vol. 30, pp. 153-167, (Oct. 1996).
Nevill-Manning, C.G., et al., "Compression and Explanation using Hierarchical Grammars", The Computer Journal, 40 (2/3), pp. 103-116, (1997).
Nevill-Manning, C.G., et al., "Linear-time, incremental hierarchy inference for compression", Proceedings of the DCC '97 Data Compression Conference, IEEE, pp. 3-11, (Mar. 1997).
Pu, C., et al., "Optimistic Incremental Specialization: Streamlining a Commercial Operating System", Proceedings of the Fifteenth ACM Symposium on Operating Systems Principles, 10 pages, (Dec. 1995).
Rotenberg, E., et al., "Trace Cache: a Low Approach to High Bandwidth Instruction Fetching", Proceedings of the 29th Annual IEEE/ACM International Symposium on Microarchitecture, pp. 24-34, (Dec. 1996).
Rotenberg, E., et al., "Trace Processors", Proceedings--Thirthieth Annual IEEE/ACM Interantional Symposium on Microarchitecture, pp. 138-148, (1997).
Srivastava, A., et al., "ATOM, A System for Buidling Customized Program Analysis Tools", ACM SIGPLAN Notices, 29 (6), pp. 196-205, (Jun. 1994).

ART-UNIT: 212
PRIMARY-EXAMINER: Powell; Mark R.
ASSISTANT-EXAMINER: Khatri; Anil
ATTY-AGENT-FIRM: Merchant & Gould P.C.

ABSTRACT:

A program is instrumented to record acyclic paths during execution of the program. A whole program path is produced from the record and provides a complete compact record of a program's entire control flow. It includes a record of crossing loop boundaries and procedure boundaries to provide a complete picture of the program's

dynamic behavior. A string compression algorithm that constructs a context-free grammar is used to compress the path trace and uncover its regular structure. Heavily executed subpaths are easily identified from the representation by traversing the whole program path to find hot subpaths according to input parameters of minimum and maximum path lengths and a minimum cost.

40 Claims, 10 Drawing figures